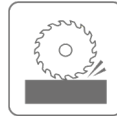


# M SEALS PKV-CRD86

Unreinforced Virgin PEEK



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



## Description

M Seals PKV-CRD86 material is a high-performance unreinforced virgin PEEK material. This material has excellent thermal resistance, high compressive strength, low wear properties and low creep values.

PKV-CRD86 material is commonly used for back-up rings, guide rings, wear rings, bushes, valve seat seals, scraper seals and other applications requiring excellent hydrolysis and steam resistance.

## Physical Properties

Property	Test method	Unit	Typical value		
Type			SMP	SMG	EXG
Colour			Beige	Beige	Beige
Density	ISO 1183	g/cm <sup>3</sup>	1.31	1.31	1.31
Hardness	ISO 868	Shore D	88	88	88
Tensile Strength	ISO 527-2	MPa	102	95	110
Elongation at break	ISO 527-2	%	19	10	20
Flexural strength		Mpa	164	140	-
Modulus of elasticity (Tensile)		Mpa	3670	3670	4000
Glass transition temperature *	DIN 53765	°C	+150	+150	+150
Melting temperature	DIN 53765	°C	+341	+343	+343
Service temperature short term **		°C	+300	+300	+300
Service temperature long term **		°C	-60/+250	-60/+250	-60/+250

\* (Information found from public sources)

\*\* (Individual testing in application conditions is mandatory)

SMP= Special manufacturing technique using Victrex PEEK 450PF fine powder

SMG= Special manufacturing technique using Victrex PEEK 450G granules

EXG= Extruded manufacturing technique using Victrex PEEK 450G granules

## Main Characteristics

- Excellent thermal resistance
- High compressive strength
- Good sliding ability
- Good creep resistance
- Good wear properties
- Hydrolysis & steam resistance

## Typical Products

- Wear strip
- Bearing rings / guide rings
- Bushes
- Valve seat seals
- Anti-Extrusion / Back-Up Rings
- Bespoke parts

## Typical Applications

Due to its excellent thermal resistance, compressive strength and low creep values, this material is an excellent choice for applications using anti-extrusion/back-up rings where high temperatures and pressures may be seen.

PKV-CRD86 is commonly used within the Oil and Gas and Aerospace industries.

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